

# Management of genital warts in pregnancy

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## Summary

Genital warts are the most prevalent form of viral genital mucosal lesions. In pregnancy they may proliferate and become easily irritated due to the increased vascularity and altered immunity. This case highlights the importance of a multidisciplinary approach and exact planning to ensure good outcome in the management of genital warts in pregnancy.

**Key words:** Genital warts; Multidisciplinary approach; HPV; Pregnancy.

## Introduction

Genital warts are the most prevalent form of viral genital mucosal lesions. They are caused by infection with several types of the double-stranded, one-enveloped HPV [1]. There are more than 80 HPV types which have been identified [2]. The types which affect the genital area are divided into low- and high-risk groups depending on their malignant potential [2, 3]. Approximately 90% of all genital warts are related to HPV types 6 and 11 (low-risk group).

We report a case of a 23-year-old primigravida to highlight the importance of a multidisciplinary approach and accurate planning to ensure a good outcome in the management of genital warts with pregnancy.

## Case Report

A 23-year-old primigravida booked under community care noted a small swelling near the anal orifice when she was six weeks pregnant. Two weeks later she was seen by her physician who recognized the presence of a rapidly growing wart near the anal orifice and referred her to the GUM clinic. The patient had started her sexual activity at the age of 16 and had six previous sexual partners. She used to have unprotected sex and was not aware that any of her partners had had a sexually transmitted disease. She had never been treated for any sexually transmitted infections and she used to smoke about ten cigarettes per day.

The patient was reviewed in the GUM (genito-urinary medicine) clinic at 12 weeks of gestation. At that time a significant increase in the size of the wart was noted. She tested negative for sexually transmitted diseases and was treated with cryocautery. She was followed up in the GUM clinic after that and cryocautery treatment was repeated on another occasion without any notable effect. A decision was taken to refer her to the antenatal clinic for gynaecological assessment. The patient was at 27 weeks of gestation when she was first seen in the clinic. Her main complaints besides the rapidly growing lesion were increasing discomfort and pain, difficulties with defecation and occasional bleeding from the swelling. Examination showed that the lesion was about 10 x 10 cm in size covering

the entire perineum and perianal area. It was difficult to ascertain the exact site of origin because of the marked tenderness. A biopsy was taken from the superficial surface of the wart which confirmed its benign nature. It was decided at this stage that surgical treatment was required because of the rapidly growing nature of the lesion, the increase in the intensity of the symptoms and the need to have a thorough histological examination. The patient was reviewed by a plastic surgeon preoperatively to discuss the possible need for a skin graft if a wide excision of the skin was required. A colorectal surgeon was involved in the planning for the procedure as well.

A joint operation by the gynaecologist, colorectal and plastic surgeons was arranged. Under Epidural anaesthesia and sedation, the lesion was assessed and found to be 15 x 15 cm in size and arising mainly from the perianal and anal skin with no involvement of the anal canal. There was limited extension into the perineum (Figure 1). No evidence was observed suggestive of malignant change. The lesion was excised with unipolar diathermy from outside inwards securing the blood supply of each stem of the complex warty lesion separately. The extent of the skin damage at the end of the procedure did not require a skin graft (Figure 2). The wound was covered by opsit dressing and the patient was kept on oral antibiotics and laxatives postoperatively. The epidural anaesthesia was left for 24 hours for pain control and a urinary catheter was kept in for the same duration to care for the bladder. The welfare of the baby was monitored preoperatively by ultrasound scan examination to assess growth and fluid volume, and cardiotocography was performed before the operation. In the postoperative period routine midwifery care was found to be sufficient in monitoring the baby. The patient was discharged home on day 3 under the care of her physician, and the district nurse was informed to care for the wound.

Histopathology showed multiple viral papillomata with florid koilocytosis and foci of low grade dysplasia. The slides were reviewed and discussed at the gynae-oncology MDT meeting. It was agreed that the dysplasia associated with basal cell hyperplasia was very mild and mainly related to the florid HPV. The findings were regarded as benign viral warts.

The patient made a good recovery. She was followed-up after that on three different occasions. It took a few weeks for the complete healing of the perineum. Mode of delivery was discussed with the patient and she preferred to have an elective caesarean section to avoid the chance of damage or injury to the perineum. The caesarean was performed at 38 weeks of gestation.

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Fig. 1



Figure 1. — Genital warts before treatment.

Fig. 2



Figure 2. — Results of treatment.

## Discussion

Genital warts are the most prevalent form of viral genital mucosal lesions. They are caused by infection with several types of the double-stranded, one-enveloped HPV [1]. There are more than 80 HPV types which have been identified [2]. The types which affect the genital area are divided into low- and high-risk groups depending on their malignant potential [2, 3]. Approximately 90% of all genital warts are related to HPV types 6 and 11 (low-risk group). We report a case of a 23-year-old primagravida to highlight the importance of a multidisciplinary approach and accurate planning to ensure a good outcome in the management of genital warts with pregnancy.

The infection manifests as verrucous fleshy whitish to red papules that may coalesce into plaques, ranging in size from a few millimetres to several centimetres [4]. The warts may be located anywhere in the ano-genital area, including the mucosal surfaces [5]. Lesions typically appear within weeks to months after exposure, and they are generally asymptomatic, but may be painful, friable or pruritic [3].

In the U.K., The highest rate of infection is seen among women aged 19 to 22 and men aged 22 to 26 years [2]. The risk factors for acquiring HPV infection include early age of intercourse [6], high of number of sexual partners and high number of partners' sexual partners [7]. This is all due to the increase of the risk of exposure to HPV infection. Spontaneous resolution of HPV infection is less likely in immunocompromised individuals [8].

The diagnosis is usually made based on the clinical presentation of lesions located on the anogenital area or adjacent areas, such as the mons pubis [5]. Biopsy is generally not performed for the diagnosis of genital warts however it may be indicated if the warts appear fixed to underlying structures, refractory to standard therapy, ulcerated or if an individual wart is larger than 1 cm [3].

In pregnancy, genital warts may proliferate and become easily irritated due to the increased vascularity and altered immunity, therefore prophylactic removal might be indicated. The genital warts may be removed with destructive methods including cryotherapy, surgery or laser [3]. Trichloroacetic acid can be also used but this is usually more effective for the treatment of moist warts. Podophyl-

lum resin and podophyllotoxin must be avoided, as they are teratogenic. Imiquimod has not been adequately studied in pregnant patients thus should also be avoided [3].

HPV types 6 and 11 have been associated with laryngeal papillomatosis in infants. However, the presence of genital warts is not an indication for caesarean delivery [9]. A caesarean section is indicated only in the rare circumstance of obstruction or bleeding.

There is no cure for genital warts. The goal of treatment is to eliminate visible lesions. There is no evidence to show that treatment affects the natural course of HPV infection [10].

## Conclusion

Early diagnosis and prompt treatment is required for genital warts in pregnancy particularly if it happens in the early stages and shows a tendency for rapid growth.

Surgical treatment was required because the lesion was progressively increasing, more symptomatic and there was a need to verify the histological nature of the deep parts of the lesion.

The multidisciplinary approach and careful planning ensured a good outcome.

The indication for caesarean section was based on maternal request to avoid any possible trauma to this area during delivery.

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